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Davidson, Davidson & Kappel, LLC 485 7th Avenue 14th Floor New York, NY 10018			EXAMINER ROE, JESSEE RANDALL	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JEAN-PAUL MARDON,  
JEAN SENEVAT, and DANIEL CHARQUET

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Appeal 2009-015072  
Application 10/728,239  
Technology Center 1700

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Before TERRY J. OWENS, JEFFREY T. SMITH, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

## STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-7.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b).<sup>3</sup>

### *The Invention*

Appellants' invention is directed to a zirconium based alloy having a total content of Cr + V in the amount of 200 to 700 ppm, and a sheathing tube comprising the zirconium based alloy. Representative independent claim 1 is reproduced below:

1. A zirconium based alloy comprising a zirconium base and, by weight:

Fe and at least one of the elements selected from the group consisting of Cr and V, a total of the contents in Fe and Cr + V being 200 to 700 ppm;

0.8% to 1.3% by weight of niobium;

1100 to 1700 ppm of oxygen;

less than 100 ppm of carbon;

10 to 35 ppm of sulfur;

less than 50 ppm of silicon and;

tin content exceeding zero and being 100 ppm or less in weight.

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<sup>2</sup> See 37 C.F.R. § 41.31(a)(1)

<sup>3</sup> In rendering this decision we have considered the Appellants' submission filed on February 24, 2009. We have also considered the Examiner's position as set forth in the Examiner's Answer dated May 7, 2009, and the office action mailed August 18, 2008.

The Examiner relied on the following references in rejecting the appealed subject matter:

Mardon et al.	US 5,648,995	Jul. 15, 1997
Rebeyrolle et al.	US 5,832,050	Nov. 3, 1998
Charquet et al.	US 6,863,745 B1	Mar. 8, 2005

C.L. Easterday, *Zirconium Analysis by Production Control Quantometer*, 31 ANALYTICAL CHEMISTRY 1867 (1959).

Appellants seek review of the Examiner's rejections of claims 1-7 as follows:

I. Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Mardon, Easterday and Rebeyrolle.

II. Claims 1-2 stand rejected on the ground of obvious-type double patenting over claim 9 of U.S. Patent 6,863,745.

## OPINION

### Rejection I

The dispositive issue for the rejection on appeal is the following:

Did the Examiner err in determining that Mardon describes a zirconium based alloy having a total content of Cr + V in the amount of 200 to 700 ppm as required by the subject matter of independent claims 1 and 2?

After thorough review of the respective positions provided by Appellants and the Examiner, we agree with Appellants that the Examiner has not established that Mardon's zirconium based alloy is necessarily comprised of Cr + V in the amount required by the claimed invention and

therefore does not render the subject matter of independent claims 1 and 2 obvious within the meaning of § 103.

The Examiner found that Mardon describes a zirconium based alloy that comprises elements in amounts that overlap the alloy of the claimed invention. The Examiner recognized that Mardon does not specifically disclose the amounts of chromium, vanadium, and sulfur contained in the alloy. However, the Examiner asserted that Mardon would contain chromium and vanadium in amounts required by the claimed invention.

(Ans. 4). Specifically the Examiner states:

[I]t would be expected that the zirconium in the zirconium alloy disclosed by Mardon et al. ('995) would contain 20-450 ppm chromium, 20-50 ppm vanadium and 20-50 ppm tin, as disclosed by Easterday because Easterday teaches that chromium and vanadium would be present in zirconium as impurities (Table 3-4 and page 1867, 1<sup>st</sup> column, and page 1868, 3<sup>rd</sup> column).

(Ans. 4). The Examiner asserts that alloys presented in Tables III and IV of Easterday do not appear to have been manipulated. (Ans. 11).

Appellants argue, and we agree, that Easterday's description of the zirconium alloys are not necessarily representative of the zirconium found in Mardon. (App. Br. 6). Appellants properly recognize that Easterday is directed to demonstrating the accuracy of direct-reading spectroscopy and analyzing zirconium samples and that the samples utilized in the test have been manipulated. (*Id.*). Easterday specifically discloses (page 1867, 2<sup>nd</sup> column) that zirconium alloy standards utilized in the test could have been modified to adjust the various contents of the elements contained therein. Contrary to the Examiner's position, Easterday discloses the samples exhibited in Tables III and IV were prepared based upon the methods for

preparing the standards described on page 1867. (See page 1868, 1<sup>st</sup> column). Thus, it appears that the samples exhibited in Tables III and IV could have been modified to adjust the various contents of the elements contained therein. Consequently, Easterday does not necessarily establish that Mardon describes a zirconium based alloy having a total content of Cr + V in the amount of 200 to 700 ppm as required by the subject matter of independent claims 1 and 2.

During examination, the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

The Rebeyrolle reference was cited by the Examiner for describing modifying the sulfur content of the zirconium alloy, not for describing the amounts of chromium and vanadium. (Ans. 5).

## Rejection II

We decline to reach the merits of the obviousness type double patenting rejection. Appellants have indicated that a terminal disclaimer will be filed to obviate this rejection. (App. Br. 9). The Examiner should process the obviousness type double patenting rejection consistent with MPEP § 804 upon return of the present application to the jurisdiction of the Examiner.

For the foregoing reasons we reverse the stated prior art rejection.

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DECISION

The 35 U.S.C. §103 rejection of claims 1-7 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

REVERSED

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